



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,704	12/18/2001	John H. Yoakum	7000-112	7532
27820	7590	03/10/2005	EXAMINER	
WITHROW & TERRANOVA, P.L.L.C. P.O. BOX 1287 CARY, NC 27512			THAI, CANG G	
			ART UNIT	PAPER NUMBER
			3629	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,704

Applicant(s)

YOAKUM ET AL.

Examiner

Cang G. Thai

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 18, 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

1. whether the invention is within the technological arts; and
2. whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere idea in the abstract (i.e. abstract ideas, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e. physical sciences as opposed to social sciences for example), and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, use or advance the technological arts.

In the present case, Claim 1 is directed to "a method locating available parking comprising:

- a) receiving a request initiated by a mobile terminal to identify available parking;
- b) determining a location the mobile terminal;

- c) identifying the available parking based on the location of the mobile terminal; and
- d) effecting delivery of parking information bearing on the available parking to the mobile terminal”.

In the present case, Claim 1 does not require any technology. The recited steps of locating available parking does not apply, involve, use, or advance the technological arts since all of the recited steps can be done with no technology at all. The recited steps only constitute an idea of identifying available parking locations via a wireless communication system.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful (specific utility), concrete (repeatability and/or implementation without undue experimentation), and tangible (a real or actual affect) result.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 1-37 recite the limitation "a mobile terminal" in "parking". There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 3629

6. Claim 1 recites "available". The preamble mentions the term "available", which normally means "present or ready for immediate use", but there is no step of "intermediate use" in the method for locating available parking. It appears that they should be related, but no positive language showing the relationship has been shown.

It is vague for step (a) through step (d). How is step (a) carries out?

7. Claim 13 recites term "system". The preamble mentions the term "system", which normally means "the configuration that includes all functional components of a computer and its associated hardware", but there is no step of "functional components" in a system. It appears that they should be related, but no positive language showing the relationship has been shown. In the body of claim in step (a) mentions term "network", which normally means "a group of computers and associated devices that are connected by communication facilities", but there is no step of "associated devices that are connected by communication facilities". It appears that they should be related, but no positive language showing the relationship has been shown.

8. Claim 25 recites term "computer readable". The preamble mentions the term "computer readable", which normally means "of, pertaining to, or characteristic of information that can be interpreted and acted on by a compiler", but there is no step of "a compiler" in a computer readable medium. It appears that they should be related, but no positive language showing the relationship has been shown.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Application Publication No. US 2004/0015290 (CURBOW ET AL.).

As for Claim 1, CURBOW discloses a method locating available parking comprising:

- a) receiving a request initiated by a mobile terminal to identify available parking {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over “the server system reports all available parking spaces 360”};
- b) determining a location the mobile terminal {Column 3, Paragraph [0030], Lines 2-4, wherein this reads over “the motorist can determine the most appropriate space for the vehicle”};
- c) identifying the available parking based on the location of the mobile terminal {Column 3, Paragraph [0030], Lines 4-5, wherein this reads over “for example, if the motorist drives a compact vehicle, a compact parking space would be chosen”}; and
- d) effecting delivery of parking information bearing on the available parking to the mobile terminal {Column 3, Paragraph [0030], Lines 6-7, wherein this reads over “location data and or vehicle type information 370 is transmitted to server system 303”}.

As for Claim 2, CURBOW discloses the method of claim 1 wherein the determining step includes expanding the location of the mobile terminal into an associated area interest and the identifying step identifies parking areas or facilities within the area of interest and identifies the available parking at the parking areas or facilities within the area of interest {Column 3, Paragraph [0030], Lines 11-12, wherein this reads over “alternatively, only those parking spaces are closet to the motorist are reported”}.

As for Claim 3, CURBOW discloses the method of claim 2 further comprising determining a direction of travel for the mobile terminal and wherein the expanding step uses the direction of travel when creating the area interest {Column 3, Paragraph [0030], Lines 9-11, wherein this reads over “for example, if the vehicle is a handicap van, the parking system 300 would report an available handicap parking space”}.

As for Claim 4, CURBOW discloses the method of claim 1 further comprising effecting delivery of directions associated with the available parking user via the mobile terminal {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over “the server system reports all available parking space”}.

As for Claim 5, CURBOW discloses the method of claim 1 further comprising effecting delivery of a map associated with the available parking user via the mobile terminal {Column 3, Paragraph [0029], Lines 13-14, wherein this reads over “based on the map 305, the location and type of parking spot is retrieved and provided to the motorist 78”}.

As for Claim 6, CURBOW discloses the method of claim 1 further comprising:

Art Unit: 3629

- a) receiving a request initiated by the mobile terminal to reserve parking associated with the available parking {See Fig. 8, Element 615}; and
- b) requesting a reservation associated with the available parking {See Fig. 8, Element 625}.

As for Claim 7, CURBOW discloses the method of claim 6 further comprising:

- a) receiving confirmation for the reservation {See Fig. 8, Element 630}; and
- b) delivering confirmation indicia based on the confirmation to the mobile terminal, wherein the confirmation indicia can be provided to a parking area or facility providing the available parking to confirm the reservation {See Fig. 8, Element 635}.

As for Claim 8, CURBOW discloses the method of claim 7 further comprising delivering the confirmation indicia to the parking area or facility {Column 6, Paragraph [0060], Lines 1-6, wherein this reads over “if mapping information is considered, that is by using the GPS information to determine that the car’s location is on a freeway with limited exits, another embodiment can bias the results of step 635 and look for parking lots nearest the upcoming exits, instead of directing the user to lots that require driving a long time on surface streets”}.

As for Claim 9, CURBOW discloses the method of claim 1 wherein the identifying step further comprises:

- a) accessing a profile associated with the mobile terminal to access parking criteria defined by a user of the mobile terminal {See Fig. 4, Element 401};
and

- b) selecting the available parking based on the parking criteria in the profile {See Fig. 4, Element 403}.

As for Claim 10, CURBOW discloses the method of claim 1 further comprising gathering information bearing on the availability of parking in at least one parking area or facility and from which the available parking is determined {See Fig. 4, Element 404}.

As for Claim 11, CURBOW discloses the method of claim 1 further comprising accounting for services associated with providing the parking information {See Fig. 4, Element 405}.

As for Claim 12, CURBOW discloses the method of claim 1 wherein communications with the mobile terminal are facilitated using one the group consisting of text, audio, and browser based communication technologies {See Fig. 4, Element 401}.

As for Claim 13, CURBOW discloses a system for locating available parking comprising:

- a) a network interface {Column 1, Paragraph [0008], Lines 1-3, wherein this reads over "the invention uses video cameras with image processing on a server to determine which spaces in a parking lot or structures are empty"}; and
- b) control system associated with the network interface and adapted to:
 - i) receive a request initiated by a mobile terminal to identify available parking {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over "the server system reports all available parking space"};

- ii) determine a location of the mobile terminal {Column 3, Paragraph [0030], Lines 2-4, wherein this reads over “the motorist can determine the most appropriate space for the vehicle”};
- iii) identify the available parking based on the location of the mobile terminal {Column 3, Paragraph [0030], Lines 4-5, wherein this reads over “for example, if the motorist drives a compact vehicle, a compact parking space would be chosen”}; and
- iv) effect delivery of parking information bearing on the available parking to the mobile terminal {Column 3, Paragraph [0030], Lines 6-7, wherein this reads over “location data and or vehicle type information 370 is transmitted to server system 303”}.

As for Claim 14, CURBOW discloses the system of claim 13 wherein the control system is further adapted to expand the location of the mobile terminal into an associated area of interest, identify parking areas or facilities within the area of interest, and identify the available parking at the parking areas or facilities within the area of interest {Column 3, Paragraph [0030], Lines 11-12, wherein this reads over “alternatively, only those parking spaces are closet to the motorist are reported”}.

As for Claim 15, CURBOW discloses the system of claim 14 wherein the control system is further adapted to determine a direction travel for the mobile terminal and use the direction of travel when creating the area of interest {Column 3, Paragraph [0030], Lines 9-11, wherein this reads over “for example, if the vehicle is a handicap van, the parking system 300 would report an available handicap parking space”}.

As for Claim 16, CURBOW discloses the system of claim 13 wherein the control system is further adapted to effect delivery of directions associated with the available parking to a user via the mobile terminal {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over "the server system reports all available parking space"}.

As for Claim 17, CURBOW discloses the system of claim 13 wherein the control system is further adapted to effect delivery of a map associated with the available parking to a user via the mobile terminal {Column 3, Paragraph [0029], Lines 13-14, wherein this reads over "based on the map 305, the location and type of parking spot is retrieved and provided to the motorist 78"}.

As for Claim 18, CURBOW discloses the system of claim 13 wherein the control system is further adapted to:

- a) receive a request initiated by the mobile terminal to reserve parking associated with the available parking {See Fig. 8, Element 615}; and
- b) request reservation associated with the available parking {See Fig. 8, Element 625}.

As for Claim 19, CURBOW discloses the system of claim 18 wherein the control system is further adapted to:

- a) receive confirmation for the reservation {See Fig. 8, Element 630}; and
- b) deliver confirmation indicia based on the confirmation to the mobile terminal,

wherein the confirmation indicia can be provided to a parking area or facility providing the available parking to confirm the reservation {See Fig. 8, Element 635}.

As for Claim 20, CURBOW discloses the system of claim 19 wherein the control system is further adapted to deliver the confirmation indicia to the parking area or facility {Column 6, Paragraph [0060], Lines 1-6, wherein this reads over "if mapping information is considered, that is by using the GPS information to determine that the car's location is on a freeway with limited exits, another embodiment can bias the results of step 635 and look for parking lots nearest the upcoming exits, instead of directing the user to lots that require driving a long time on surface streets"}.

As for Claim 21, CURBOW discloses the system of claim 13 wherein, to identify the available parking, the control system further adapted to:

- a) access a profile associated with the mobile terminal to access parking criteria defined by a user of the mobile terminal {See Fig. 4, Element 401};
and
- b) select the available parking based on the parking criteria in the profile {See Fig. 4, Element 403}.

As for Claim 22, CURBOW discloses the system of claim 13 wherein the control system is further adapted to gather information bearing on the availability of parking in at least one parking area or facility and from which the available parking is determined {See Fig. 4, Element 404}.

As for Claim 23, CURBOW discloses the system of claim 13 wherein the control system is further adapted to account for services associated with providing the parking information {See Fig. 4, Element 405}.

As for Claim 24, CURBOW discloses the system of claim 13 wherein communications with the mobile terminal are facilitated using one of the group consisting of text, audio, and browser based communication technologies {See Fig. 4, Element 401}.

As for Claim 25, CURBOW discloses a computer readable medium providing software for locating available parking, the computer readable medium comprising instructions to;

- a) receive a request initiated by a mobile terminal to identify available parking {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over “the server system reports all available parking space”};
- b) determine a location of the mobile terminal {Column 3, Paragraph [0030], Lines 2-4, wherein this reads over “the motorist can determine the most appropriate space for the vehicle”};
- c) identify the available parking based on the location of the mobile terminal {Column 3, Paragraph [0030], Lines 4-5, wherein this reads over “for example, if the motorist drives a compact vehicle, a compact parking space would be chosen”}; and
- d) effect delivery of parking information bearing on the available parking to the mobile terminal {Column 3, Paragraph [0030], Lines 6-7, wherein this

reads over "location data and or vehicle type information 370 is transmitted to server system 303"}.

As for Claim 26, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to expand the location of the mobile terminal into an associated area of interest, identify parking areas or facilities within the area of interest, and identify the available parking at the parking areas or facilities within the area of interest {Column 3, Paragraph [0030], Lines 11-12, wherein this reads over "alternatively, only those parking spaces are closet to the motorist are reported"}.

As for Claim 27, CURBOW discloses the computer readable medium of claim 26 comprising further instructions to determine a direction of travel for the mobile terminal and use the direction of travel when creating the area of interest {Column 3, Paragraph [0030], Lines 9-11, wherein this reads over "for example, if the vehicle is a handicap van, the parking system 300 would report an available handicap parking space"}.

As for Claim 28, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to effect delivery of directions associated with the available parking a user via the mobile terminal {Column 3, Paragraph [0030], Lines 1-2, wherein this reads over "the server system reports all available parking space"}.

As for Claim 29, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to effect delivery of a map associated with the available parking to a user via the mobile terminal {Column 3, Paragraph [0029], Lines 13-14, wherein this reads over "based on the map 305, the location and type of parking spot is retrieved and provided to the motorist 78"}.

As for Claim 30, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to:

- a) receive a request initiated by the mobile terminal to reserve parking associated with the available parking {See Fig. 8, Element 615}; and
- b) request a reservation associated with the available parking {See Fig. 8, Element 625}.

As for Claim 31, CURBOW discloses the computer readable medium of claim 30 comprising further instructions to:

- a) receive confirmation for the reservation {See Fig. 8, Element 630}; and
- b) deliver confirmation indicia based on the confirmation to the mobile terminal,
wherein the confirmation indicia can be provided to parking area or facility providing the available parking to confirm the reservation {See Fig. 8, Element 635}.

As for Claim 32, CURBOW discloses the computer readable medium of claim 31 wherein the control system is further adapted to deliver the confirmation indicia to the parking area or facility {Column 6, Paragraph [0060], Lines 1-6, wherein this reads over "if mapping information is considered, that is by using the GPS information to determine that the car's location is on a freeway with limited exits, another embodiment can bias the results of step 635 and look for parking lots nearest the upcoming exits, instead of directing the user to lots that require driving a long time on surface streets"}.

As for Claim 33, CURBOW discloses the computer readable medium of claim 25 comprising further instructions, when identifying the available parking, to:

- a) access a profile associated with the mobile terminal to access parking criteria defined by a user of the mobile terminal {See Fig. 4, Element 401};
and
- b) select the available parking based on the parking criteria in the profile {See Fig. 4, Element 403}.

As for Claim 34, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to gather information bearing on the availability of parking in at least one parking area or facility and from which the available parking is determined {See Fig. 4, Element 404}.

As for Claim 35, CURBOW discloses the computer readable medium of claim 25 comprising further instructions to account for services associated with providing the parking information {See Fig. 4, Element 405}.

As for Claim 36, CURBOW discloses the computer readable medium of claim 25 wherein communications with the mobile terminal are effected using one of the group consisting of text, audio, and browser based communication technologies {See Fig. 4, Element 401}.

As for Claim 37, which has the same limitations as in Claim 13, therefore, it is rejected for the similar reasons set forth in Claim 13.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

I. U.S. Patent:

- 1) U.S. Patent No. 6,519,329 (HJELMVIK) is cited to teach a parking system in which a mobile telephone can be used to commence and terminate a parking period,
- 2) U.S. Patent No. 6,553,310 (LOPKE) is cited to teach a method of and apparatus for topologically based retrieval of information, and
- 3) U.S. Patent No. 6,246,337 (ROSENBERG ET AL.) is cited to teach a vehicle parking system.

II. Non-Paten Literature:

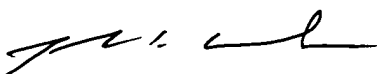
- 1) John Mesenbrink, "Campus Communications", September 2001, Security, ABI/INFORM Global, Page 54.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cang (James) G. Thai whose telephone number is (703) 305-0553. The examiner can normally be reached on 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CGT
03/4/2005



JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3300